

REMARKS

By the present amendment, applicants have amended claims 9, 13, 15, and 28 and cancelled claims 12, 17-18, and 30-52. Accordingly, claims 9-11, 13-16, and 19-29 are currently pending.

In the office action of January 3, 2003, the examiner stated that claims 17-18 and 30-52 are withdrawn from further consideration as being drawn to a non-elected invention. By the present amendment, applicants have cancelled the non-elected claims (i.e., claims 17-18 and 30-52).

On page 2 of the office action, the examiner objected to the disclosure in the specification due to informalities concerning the priority data. According to the examiner, the priority data must be updated. Accordingly, applicants have amended the specification to update the priority data. Therefore, applicants respectfully request that the objection to the specification be withdrawn.

In the office action, the examiner rejected claim 15 under 35 U.S.C. §112, second paragraph allegedly for being indefinite. According to the examiner, claim 15 recites the phrase "one or more times." The examiner contends it is not clear as to how many "more times" are required to accomplish the method of the present invention.

Upon reviewing claim 15, applicants conclude that the phrase objected to is unnecessary. Accordingly, applicants have amended claim 15 by deleting the phrase "one or more times." Thus, applicants respectfully request that the rejection under 35 U.S.C. §112 be withdrawn.

Applicants noticed that claim 28 also recites the phrase "one or more times." Applicants also conclude that the phrase is unnecessary in claim 28. Thus, applicants have also amended claim 28 by deleting the phrase "one or more times."

The examiner also rejected claims 9-14 and 16 under 35 U.S.C. §102(a) as being anticipated by de Kruif (*PNAS* USA 1995, 92:3938-3942). The inventors of the present invention, Dr. Ton Logtenberg and Dr. Leon Terstappen, are co-authors of the de Kruif et al. article. The article also lists John deKruif and Edwin Boel as co-authors of the de Kruif et al. article.

Applicants submit herewith a Rule 132 Declaration, executed by the co-inventor Ton Logtenberg, Ph.D., in accordance with *In re Katz* (Exhibit 1). The Rule 132 Declaration states that only Dr. Logtenberg and Dr. Terstappen contributed to the conception of the invention (see Exhibit 1, paragraph 1 and 4). Furthermore, the Rule 132 Declaration states that Dr. de Kruif and Dr. Boel did not contribute to the conception of the invention (see Exhibit 1, paragraph 5 and 6).

Rather, Dr. de Kruif contributed his expertise under the direction and supervision of Dr. Logtenberg and Dr. Terstappen in performing experiments utilizing a library of phage particles that express antibody fragments of the surface of the phage particles and flow cytometry to isolate monoclonal antibodies specific for subpopulations of cells present in a heterogeneous mixture.

Similarly, Dr. Boel contributed his expertise under the supervision of Dr. Logtenberg and Dr. Terstappen in performing general recombinant DNA technology-based experiments aimed at identifying the antibody variable genes used in isolated antibody fragments and in supporting the experiments carried out by Dr. de Kruif.

The de Kruif et al. article is a publication of the inventors that was published less than one year before the priority date of the present application. A publication of the inventors that was published less than one year before the priority date of a patent application does not constitute prior art with respect to that application. *In re: Katz*, 215 U.S.P.Q. 15 (CCPA 1982), MPEP §2137. According to *In re: Katz*, "... authorship of an article by itself does not raise a presumption of inventorship with respect to the subject

matter disclosed in the article.” In re: Katz, 215 U.S.P.Q. at 17. In re: Katz requires nothing more than a reasonable showing supporting a basis for applicants position.

Accordingly, the de Kruif et al. (*PNAS* USA 1995, 92:3938-3942) article is no longer available as prior art against the present invention. Therefore, applicants respectfully request that the rejection under 35 U.S.C. §102(a) be withdrawn.

The examiner also rejected claims 19-27 and 29 under 35 U.S.C. §103(a) as allegedly being unpatentable over de Kruif et al. in view of Winter et al. (*Annu. Rev. Immunol.* 1994; 12:433-455). The examiner contends that de Kruif et al. teach isolation of phage particles by incubating with a heterogeneous population of cells. The examiner concedes that de Kruif et al. do not teach a method of obtaining phage particles by utilizing a non-target cell immobilized on a solid surface.

As stated above, the de Kruif et al. reference is no longer available as prior art. Winter et al. was cited as a secondary reference, and is not relevant by itself. Accordingly, applicants respectfully request that the rejection under 35 U.S.C. §103(a) be withdrawn.

The examiner also rejected claims 9-11, 13, 15, and 16 under 35 U.S.C. §101 on the grounds of double patenting. The examiner alleges that the applicants are claiming the same invention as that of claims 1-4 and 6 of prior U.S. Patent No. 6,265,150.

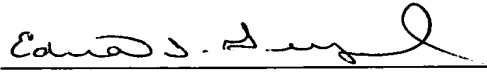
The difference between claim 1 of U.S. Patent No. 6,265,150 and claim 9 of the present invention is the recitation in the present invention that a heterogeneous cell population comprises non-target and target cells. Upon further consideration, applicants agree with the examiner that a heterogeneous population in claim 1 of U.S. Patent No. 6,265,150 contains both non-target and target cells. Therefore, claim 9 of the present invention has the same scope as that of claim 1 in U.S. Patent No. 6,265,150.

According to the office action, claim 12 was not rejected under double patenting. Therefore, applicants have cancelled claim 12 and incorporated the limitation of claim 12 into claim 9. Amended claim 9 now recites the limitation "and wherein said non-target cells and/or target cells are detectably labeled." Thus, claim 9 of the present invention has a scope which is different from that of claims 1-4 and 6 of U.S. Patent No. 6,265,150.

Furthermore, since claims 10-11, 13, 15, and 16 depend from amended claim 9, these claims also now have a different scope from claims 1-4 and 6 of U.S. Patent No. 6,265,150. Accordingly, applicants respectfully request that the rejection of claims 9-11, 13, 15, and 16 under 35 U.S.C. §101 be withdrawn.

For the reasons stated above, application respectfully request reconsideration of the rejections issued in the office action of January 3, 2003. Allowance of pending claims 9-11, 13-16, and 19-29 is earnestly requested. If the examiner has any questions or concerns regarding this amendment, the examiner is respectfully requested to contact the undersigned at the telephone number listed below.

Respectfully submitted,



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